

# Integrating Healthcare Systems



## Client Profile:

A large regional healthcare organization consisting of 21 hospitals, 14 emergency rooms, 32 rehabilitation facilities, 25 clinics, 34 long term care facilities, 26 imaging centers, and 148 individual physician practices.

## Problem:

Having grown through acquisition, the organization stored data in multiple, incompatible legacy systems throughout their facilities. The inability to access complete and accurate information rapidly was impacting quality of care across the network. The need for multiple manual processes to update records further slowed admission procedures, raised administrative costs and created opportunities for error.

## Proposed Solution:

Art2link developed automated patient data transfer routines between the electronic medical record systems in each facility within the network. The example shown below is representative of the automated activities now implemented at each facility.

- The process begins when the patient-transfer workflow is completed in PrimeSUITE. A SQL database trigger is activated which selects information for the patient record and places it in a flat-file. This file is encrypted and saved to a network share location.
- At the hospital, BizTalk reviews the file data and simultaneously transforms the data into formats compatible with the Paragon EMR system in the hospital and the Epicare system at the rehabilitation facility. The data is then automatically populated to Paragon and sent via FTP to a network share location at the rehab facility.
- At the rehabilitation center, our custom built database processor decrypts patient data, automatically updating EpicCare using the existing "admit patient" workflow.

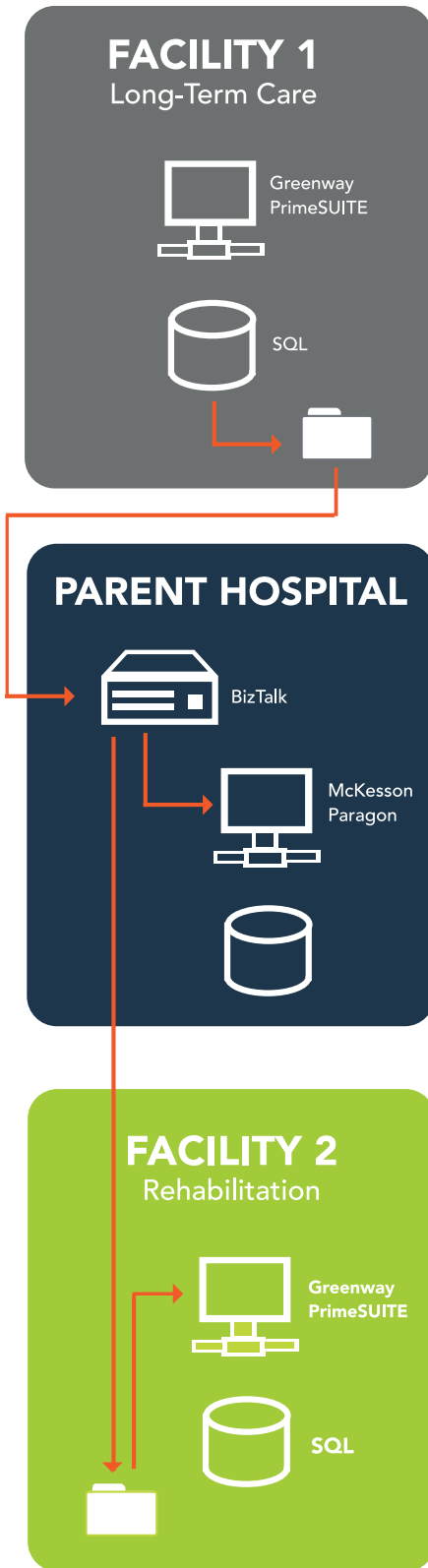
## Results:

### Improved quality of patient care

The complete, timely, and accurate updating of the parent hospital's database gives medical staff access to patient records in minutes, rather than days. The data transfer occurs so rapidly the records typically arrive before the patient physically arrives at the rehab facility. As data moves seamlessly between legacy systems there is no opportunity for patient data transcription errors

### Lower costs

Without the need to manually reenter data at each point in the transfer process the facility has seen significant decreases in the administrative costs associated with in-network patient facility transfers.



## Long-term care facility activities:

- A SQL database trigger is activated when the patient transfer workflow is completed in PrimeSUITE
- The relevant patient information is placed in a comma-delimited flat file
- The flat-file is encrypted, and placed in a network-share location

## Hospital activities:

- The network-share location is monitored in 1 minute intervals looking for new files which are transferred to the hospital network via FTP.
- Files are decrypted and business logic is applied to determine where to send the data and in what file format(s)
- Data is simultaneously transformed to formats compatible with the McKesson Paragon EMR (for the parent hospital) and the EpicCare EMR (for the rehab facility)
- Converted data is used to populate the Paragon data base and encrypted for transfer to the network share location at the rehab facility.

## Rehab facility activities:

- Integration processes in the EpicCare database monitor the network-share location for new files.
- Upon receipt of a file, the database decrypts the file
- EpicCare populates the database with the incoming patients information, using the existing EpicCare "admit patient" workflow